REMARKS

I. THE AMENDED CLAIMS ARE BELIEVED TO BE DEFINITE UNDER §112 AND COMPLIANT WITH 35 USC §101

Claims 1 - 20 have been amended to cure any legitimate issues raised by the Examiner under §101 and § 112 rejections. Specifically, Claim 1 was amended to reflect the presence of a processing unit that receives the link layer addresses. The Examiner's complaints regarding the word "between" are addressed in the amendments to Claim 1. Claims 17-20 have been amended to address the presence of a node capable of receiving the claimed information packet transmission.

The Term "Connectable" Is Proper

The Applicant has previously addressed several issues raised by the Examiner with respect to indefiniteness in the past, and it was the Applicant's belief that many of these issues had been resolved. For instance, the Examiner raises his objection to the term "connectable" in this latest rejection, but that issue has already been addressed by the Applicant with the Examiner and his Supervisor in the preceding parent application. As previously addressed with the Examiner, there is nothing incorrect or improper with the use of "connectable" as used in the claim, which is evidenced by its wide-spread use in other claims allowed to issue by the United States Patent & Trademark Office.

The Applicant's counsel has conferred with personnel from the United States Patent & Trademark Office ("PTO") to determine if the position of the PTO has changed with respect to this term, but no one has identified a single position paper, section of the MPEP or any other authority that would restrict the use of this claim term in the manner advocated by the Examiner. The Examiner points to no authority or rational explanation

for his objection to this term. As such, the Applicant respectfully requests that the Examiner withdraw this objection from any further office action rejections or responses.

The Phrase "Physical Connectivity" Is Proper

The Examiner objects to the term "physical connectivity" in the claims, and he indicated that such a term is not defined in the specification. The Examiner is directed to Pages 9-11 for general discussion of IP addresses, Link Layer addresses, and physical connectivity of a node addressed with these addresses on the network. The Summary of the Invention states "[t]he link-layer address included in an information packet transmitted on a network with the extension indicates the physical connectivity of a node to the network." Summary, ¶1, last sentence. Further, the Detailed Description states plainly that "[n]odes connected to the network have an assigned link-layer address representing the physical connection of the node to the network." Page 14, lns. 11-12.

"Physical connectivity" or "connectivity" is used throughout the specification and the meaning should be clear from this usage within the application. The Specification defines exactly what is meant by physical connectivity and IP addressing connectivity with respect to the invention. For example, see the following excerpts from the Specification.

> The link-layer address included in an information packet transmitted on a network with the extension indicates the physical connectivity of a node to the network. *Specification, p. 10, ln 11-13.*

> Nodes connected to the network have an assigned link-layer address representing the physical connection of the node to the network. Router R1 60 and Router R2 65 will have a fixed link-layer address. Mobile Node MN 64 will have a link-layer address assigned dependent upon its physical connectivity to transceiver 21. This connection and link-layer assignment is made upon power-up in cell area 3 (C3) 20. *Specification, p. 10, ln 11-16.*

> The essential depiction in Figure 2 is that Mobile Node MN 64 is switching its physical connectivity, and thus its link-layer address, as it moves across cell area boundaries. As Mobile Node MN 64 moves across cellular boundaries, there must be a mechanism for informing other nodes, including any neighboring nodes, routers, and correspondence nodes as well as Mobile Node MN 64, of the new link-layer address and establishing and updating these link-layer address associations. Moreover, other nodes may have an associated link-layer address for their physical connectivity to a network, and this connectivity may also be subject to change, such as in the case of a mobile router. Currently, establishing and updating these link-layer address associations requires specialized information packets transmitted on a network. *Specification, p. 16, ln 23 – p. 17, ln 13.*

Applicant believes that it is clear enough from this usage to understand that "physical connectivity" refers to in the claims. *See Application, p. 20, ln 6- p. 21, ln 19.* As such, the Applicant believes that Claims 9-16, as well as Claims 17-20, are not indefinite under 35 U.S.C. §112. In fact, the Applicant believes that these claims clearly define the subject matter which the applicant regards as the invention. Reconsideration of the Applicant's objections and rejections is respectfully requested.

II. THERE IS NO VIABLE "NEW MATTER" REJECTION OF THE CLAIMS

The Examiner rejected Claims 1, 9 and 17 on the grounds that these claims allegedly contain "new matter" not disclosed in the Specification. The Examiner mistakenly states that new matter has been interjected in Claims 1, 9, and 17 regarding "plurality of message types." This claim element is supported by the specification, which states the following:

> Mobile IP Extensions
>
> Extensions have been defined in the IP protocol, and extensions can be used in similar protocols, to support transmission of variable amounts of data in an information packet. This includes address information for mobile nodes, routers, and networks. *The extension mechanism in IP permits appropriate addressing and routing information to be carried by any information packet, without restriction to dedicated*

message types such as discovery, notification, control, and routing information packet formats.

Specification, p. 8, ln 12-18.

The message types carrying the link-layer address extension are not restricted, and the cited section of the specification makes clear that extensions can be found in several message types such as discovery, notification, control, and routing, to name a few examples. Specifically, the Specification states:

A number of link-layer address protocols or standards are utilized, and these need to be identified in the extension. Three specific sub-type embodiments for link-layer addresses are 1) the cdma2000 extension 2) the Ethernet extension, and 3) the Global Identifier extension. Figure 4 shows the embodiment for the cdma2000 Link-Layer Address Extension Sub-Type. The T 310 field designates the extension as a GLLA. The L 320 will have a value equal to the length of the International Mobile Station Identifier (IMSI) field plus one-octet. The ST 330 field will have an assigned value designating the GLLA sub-type as a cdma2000 Link-Layer Address Extension. The extension will contain an IMSI address field 340. This field will be in the form of <IMSI>: <Connection ID>. The <IMSI> field contains an ASCII-based representation of the IMSI. The ":" is ASCII 0x3a, and the <Connection ID> is the ASCII representation of a small, decimal number used for distinguishing different link-layer connections from the same device.

Figure 5 shows the embodiment for an Ethernet Link-Layer Address Extension sub-type GLLA. The T 410 occupies the first 8-bit field and designates the extension type as a GLLA. The L 420 8-bit field will have the length of the extension in octets plus one, which will be 7 (56 bits). The ST 430 8-bit field will identify the GLLA as an Ethernet Link-Layer Address Extension. The final address extension field 440 will contain the Ethernet Media Access Control (MAC) address 440, which is 48 bits long.

Figure 6 shows the embodiment for a Global Identifier Link-Layer Address extension sub-type GLLA. The T 510 occupies the first 8-bit field and designates the extension type as a GLLA. The next 8-bit field L 520 has a value of 9. The ST 530 is 8-bits long and designates the sub-type as a Global Identifier (EUI-64) Address extension. The final data field 540 will contain an IEEE 64-bit Global Identifier (GID) (EUI-64) Address extension, which is 64 bits in length.

Specification, p. 18, n. 20 – 20, ln. 2.

The cited claims are clearly supported by the original specification. The claimed subject matter related to a plurality of message types is not new matter, and the Examiner's position on the new matter rejection is not viable. Reconsideration of this rejection is respectfully requested in light of the present arguments. Other message types are possible within the utilization of a Mobile IP extension such as a generalized link-layer address extension.

III. CONCLUSION

The amended claims correct the any legitimate deficiencies noted in the §101 and § 112 rejections. Each specific noted deficiency has been responded to either by clarifying amendment or argument. It is believed that the rejections have been traversed by the present response that the pending claims 1-20 are allowable.

A two-month extension of time to respond to the Office Action is respectfully requested, and the proper fee is enclosed with the extension of time request. It is believed that no additional fees are necessary for this filing. If additional fees are required for filing this response, then the appropriate fees should be deducted from D. Scott Hemingway's Deposit Account No. 501,270.

Respectfully submitted,

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